

AMENDMENTS TO THE CLAIMS

Please amend the claims as they currently stand so that they are in accord with the following listing of the claims:

Claim 1 (previously presented): A stimulation arrangement, comprising:

a stimulation unit to deliver electrical stimulation pulses for stimulating body tissue; and
an evaluation unit to receive at least one electrical signal in conjunction with the delivery of a stimulation pulse and to evaluate said received electrical signal for checking stimulation success, and wherein the evaluation unit detects signal features in the received electrical signal that characterize a case of lack of stimulation success, and delivers a corresponding output signal.

Claim 2 (previously presented): The stimulation arrangement of claim 1, wherein the evaluation unit associates the received electrical signal with a stimulation pulse in respect of time and detects a feature of a polarization artifact as a signal feature in the received electrical signal.

Claim 3 (previously presented): The stimulation arrangement of claim 2, wherein the evaluation unit evaluates the received electrical signal measured after the expiry of a blanking period after the delivery of a stimulation pulse to determine a first integral (INGR1) of the measured signal over a first time interval in which the measured signal extends above a blanking level measured during the blanking period.

Claim 4 (previously presented): The stimulation arrangement of claim 3, wherein the evaluation unit determines a second integral (INGR2) of the measured signal over a second time interval beginning with an end of said first time interval and extending to an end of a predetermined time window whose beginning is an end of the blanking period.

Claim 5 (previously presented): The stimulation arrangement of claim 3, wherein the received electrical signal received after the delivery of said stimulation pulse is received in a form of time-discrete sample values, and wherein the evaluation unit further comprises a counter that

determines a number (CNT1) of said sample values of the received electrical signal, which fall into the first time interval over which the first integral is formed.

Claim 6 (previously presented): The stimulation arrangement of claim 4, wherein the evaluation unit forms an indicator flag (CROSS) having a binary value that depends on whether the measured signal during the second time interval crosses the measured blanking level.

Claim 7 (cancelled)

Claim 8 (previously presented): The stimulation arrangement of claim 6, wherein the evaluation unit continuously compares said sample values of said received electrical signal to a limit value (zn) for negative signal amplitude and delivers a signal that characterizes a stimulation success in the case of the limit value (zn) being negatively exceeded by at least one of said sample values.

Claims 9-13 (cancelled)

Claim 14 (previously presented): The stimulation arrangement of claim 1, wherein the evaluation unit continuously compares sample values of said received electrical signal to a limit value (zn) for negative signal amplitude and delivers a signal which characterizes a stimulation success in the case of the limit value (zn) being negatively exceeded by at least one of said sample values.

Claim 15 (previously presented): The stimulation arrangement of claim 2, wherein the evaluation unit continuously compares sample values of said received electrical signal to a limit value (zn) for negative signal amplitude and delivers a signal which characterizes a stimulation success in the case of the limit value (zn) being negatively exceeded by at least one of said sample values.

Claim 16 (previously presented): The stimulation arrangement of claim 3, wherein

the evaluation unit continuously compares sample values of said received electrical signal to a limit value (z_n) for negative signal amplitude and delivers a signal which characterizes a stimulation success in the case of the limit value (z_n) being negatively exceeded by at least one of said sample values.

Claim 17 (previously presented): The stimulation arrangement of claim 4, wherein the evaluation unit continuously compares sample values of said received electrical signal to a limit value (z_n) for negative signal amplitude and delivers a signal which characterizes a stimulation success in the case of the limit value (z_n) being negatively exceeded by at least one of said sample values.

Claim 18 (previously presented): The stimulation arrangement of claim 5, wherein the evaluation unit continuously compares said sample values of said received electrical signal to a limit value (z_n) for negative signal amplitude and delivers a signal which characterizes a stimulation success in the case of the limit value (z_n) being negatively exceeded by at least one of said sample values.

Claims 19-25 (cancelled)

Claim 26 (previously presented): The stimulation arrangement of claim 6 wherein an area value (AREA) is calculated as a sum of said INGR1 and said INGR2 if said CNT1 is greater than a predetermined sample number limit value (w_1), and wherein said area value (AREA) is calculated as said INGR2 if said CNT1 is less than or equal to said w_1 .

Claim 27 (previously presented): The stimulation arrangement of claim 26 wherein said evaluation unit delivers a signal that characterizes a lack of stimulation success if said AREA is determined to be less than a first predetermined area limit value (a_1).

Claim 28 (previously presented): The stimulation arrangement of claim 27 wherein said evaluation unit delivers a signal that characterizes a lack of stimulation success if said CNT1 is

greater than said w_1 and if a maximum positive sample value (MAX_POS) of said measured signal, measured at least x samples after said blanking period, is less than a predetermined amplitude limit value (z_p), and where x is a predetermined number of samples.

Claim 29 (previously presented): The stimulation arrangement of claim 28 wherein said evaluation unit delivers a signal that characterizes a stimulation success if said CNT1 is greater than said w_1 and if said maximum positive sample value (MAX_POS) of said measured signal, measured at least x samples after said blanking period, is greater than or equal to said predetermined amplitude limit value (z_p).

Claim 30 (previously presented): The stimulation arrangement of claim 29 wherein said evaluation unit delivers a signal that characterizes a stimulation success if said AREA is greater than a second predetermined area limit value (a_2).

Claim 31 (previously presented): The stimulation arrangement of claim 30 wherein said evaluation unit delivers a signal that characterizes a stimulation success if said CROSS is equal to a binary value indicating that said measured signal has crossed said measured blanking level during said second time interval.

Claim 32 (previously presented): The stimulation arrangement of claim 31 wherein said evaluation unit delivers a signal that characterizes a lack of stimulation success.